

# *Marsdenia jensenii* (Asclepiadaceae: Marsdenieae), a new species from north-eastern Queensland

Paul I. Forster

## Summary

Forster, Paul I. (1997). *Marsdenia jensenii* (Asclepiadaceae: Marsdenieae), a new species from north-eastern Queensland. *Austrobaileya* 5(1): 59–61. The new species *Marsdenia jensenii* is described and illustrated. It is endemic to north-eastern Queensland in the 'Wet Tropics' region and apparently restricted to a small area near Gadgarra State Forest.

Keywords: Asclepiadaceae, *Marsdenieae*, *Marsdenia* - Australia, *Marsdenia hemiptera*, *Marsdenia jensenii*.

Paul I. Forster, Queensland Herbarium, Meiers Road, Indooroopilly, Queensland 4068, Australia

## Introduction

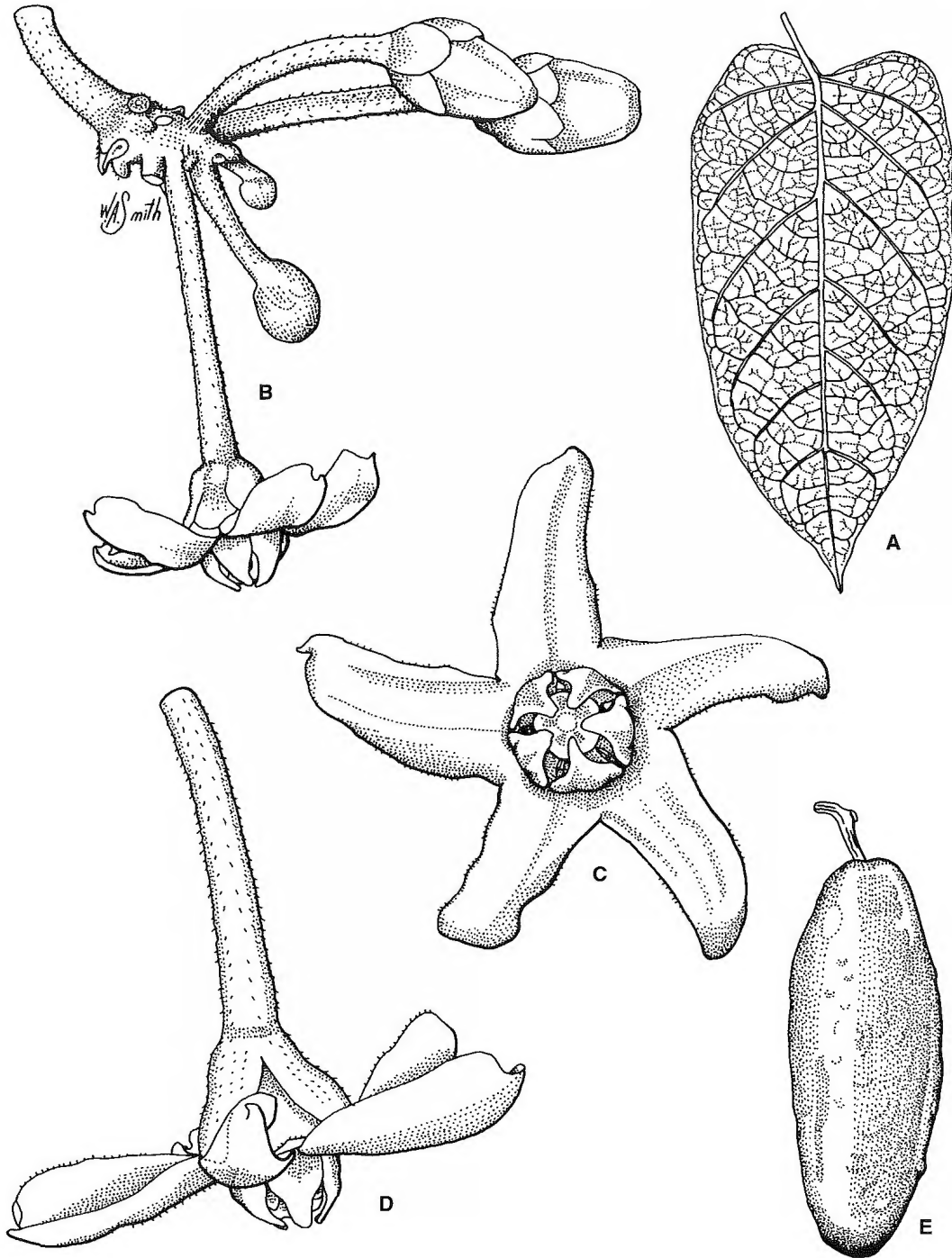
A revision of *Marsdenia* R.Br. in Australia and Papuasias was recently published wherein some seventy-eight species were enumerated (Forster 1995). The following new species was discovered too late to be included in that work, or in the subsequent *Flora of Australia* account (Forster 1996), and is described here.

## Taxonomy

*Marsdenia jensenii* P.I.Forst., sp. nov.  
affinis *M. hemipterae* H.Rch. latice albo (contra pellucido usque ad viridiflavo), florum pedicellis 15–25 mm longis (contra 5–13 mm), corollae lobis valde dextris (contra  $\pm$  rectis usque ad modice dextris), sepalis orbicularis usque ad orbicularo-ovatis (contra lanceolatis), coronae staminalis lobis apicem styli superantibus (contra non superantibus), poliniis ellipsoideis magnioribus 0.72–0.74 mm longis (contra globoso-ovoideus 0.5–0.55 mm longis) differt.

**Typus:** Queensland. COOK DISTRICT: State Forest Reserve 310, Gadgarra, track to Yeti Ridge, 17°17'S, 145°44'E, 15 Feb 1995, *R. Jensen* 105 (holo: QRS; iso: BRI). Canopy liane; latex white; indumentum of simple, multicellular trichomes that are uncoloured or

pale golden in colour. Stems woody, lenticillate and up to 5 cm thick with age; internodes up to 150 mm long and 4 mm diameter, with scattered trichomes when young. Leaves petiolate; petioles 30–50 mm long, 1–1.5 mm diameter, grooved on top, with scattered trichomes; colleters rounded to shortly subulate, 6 to 8 at base of lamina. Leaf lamina lanceolate-ovate to ovate, up to 160 mm long and 70 mm wide; tip acute to shortly acuminate; base weakly cordate to almost truncate; venation comprising 9 to 11 primary lateral veins per side of midrib and secondary interlateral reticulate veins; upper surface dark green, primary venation visible but not prominent, glabrous; lower surface pale green, primary and secondary venation prominent, glabrous. Inflorescence racemiform, up to 25 mm long; peduncle 11–15 mm long, c. 1 mm diameter, with sparse trichomes; bracts lanceolate to triangular, 1–1.5 mm long, 0.5–0.7 mm wide, with sparse to dense trichomes; flowers 1–20. Flowers 7–8 mm long, 17–22 mm diameter; pedicels 15–25 mm long, 1–2 mm diameter, with sparse trichomes. Sepals orbicular to orbicular-ovate, overlapping, 5.5–6 mm long, 4–5 mm wide, with scattered trichomes, ciliate. Corolla rotate, 17–22 mm diameter, green outside, faintly purplish inside; tube 1.5–2 mm long, not pouched at top, mainly glabrous but with a few scattered trichomes; lobes lanceolate with a bluntly acute tip, dextrorse, 7–10 mm long, 4.8–5 mm wide, mainly glabrous with a few scattered trichomes towards base, ciliate.



**Fig. 1.** *Marsdenia jensenii*. A. undersurface of leaf showing lateral and interlateral venation.  $\times 0.6$ . B. inflorescence  $\times 2$ . C. face view of flower  $\times 3$ . D. lateral view of flower  $\times 3$ . E. lateral view of fruit  $\times 0.4$ . A & E from Forster 17132 & Jensen (BRI); B–D from Jensen 105 (BRI). Del. W. Smith.

Corolline corona absent. Staminal corona 4–5 mm long, 4–5.5 mm diameter, yellow; lobes in close proximity to one another, tips overtopping style-head, 7–10 mm long, 4.8–5 mm wide, upper portion lanceolate with an irregularly blunt tip, lower portion  $\pm$  rectangular. Staminal column c. 4 mm long and 3 mm diameter; anther appendages ovate, 0.8–1 mm long, 0.8–1 mm wide; alar fissure c. 2 mm long. Style-head flattened-umbonate, c. 1 mm long, 2.5–2.8 mm diameter. Pollinaria c. 0.67 mm long and 1.53 mm wide; pollinia ellipsoid, 0.72–0.74 mm long, 0.34–0.36 mm wide; corpusculum oblong-ovate, 0.34–0.38 mm long, c. 0.19 mm wide; caudicles c. 0.95 mm long and 0.43–0.9 mm wide, widest at corpusculum end. Fruit cylindrical-oblong, c. 14.5 cm long and 5.5 cm diameter; seeds not seen. Fig. 1.

**Additional specimen examined :** Queensland. COOK DISTRICT: S.F.310 Gadgarra, track to Yeti Ridge, Jul 1995, Forster 17132 & Jensen (BRI).

**Distribution and habitat:** *Marsdenia jensenii* is thus far known only from Gadgarra State Forest at the western base of Bartle Frere, in the 'Wet Tropics' of north-eastern Queensland. Plants grow as canopy lianes in complex notophyll vineforest on soils derived from basalt.

**Notes:** *Marsdenia jensenii* appears to be related to *M. hemiptera* H.Rch. in general habit and floral morphology and keys to that species in Forster (1995). *M. jensenii* is easily differentiated from *M. hemiptera* on floral characters with its pedicels 15–25 mm long (versus 5–13 mm), strongly dextrorse corolla lobes (versus  $\pm$  straight to slightly dextrorse), orbicular to orbicular-ovate sepals (versus lanceolate), staminal corona lobes overtopping the style-head (versus not over-topping), and larger ellipsoid pollinia that are 0.72–0.74 mm long (versus globose-ovoid pollinia that are 0.5–0.55 mm long). The nearly glabrous foliage and white latex of *M. jensenii* also differs from that of *M. hemiptera* which is always beset with ferruginous (ginger) indumentum and has clear or greenish-yellow latex.

**Conservation status:** *Marsdenia jensenii* appears to have a distribution largely restricted to Gadgarra State Forest where it appears to be reasonably abundant, as seedlings were common in places. It is highly likely that a detailed survey of the area will reveal further populations and despite the current paucity of herbarium records it is felt that no conservation coding is warranted.

**Etymology:** The specific epithet honours Rigel Jensen of Malanda who first discovered and collected this species.

#### Acknowledgements

Thanks to Rigel Jensen for showing me the plant in habitat, Les Pedley (BRI) for the Latin translation, and Will Smith (BRI) for the illustrations.

#### References

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